

THE UNIVERSITY OF RHODE ISLAND  
College of Education and Professional Studies  
School of Education  
Specialization Requirements in Secondary Education - CHEMISTRY

Date(s) Completed	Grade	Course Number	Title	Prerequisites	Credits
		CHM 101 & 102 (or CHM 191)	General Chemistry and Lab		3 & 1
		CHM 112 & 114 (or CHM 192)	General Chemistry II and Lab	CHM 101, 102	3 & 1
		CHM 212 (Fall only)	Quantitative Analysis	CHM 112 and 114, or CHM 192	4
		CHM 227 (or 291)	Organic Chemistry I	CHM 112 or CHM 192	3
		CHM 228 (or 292)	Organic Chemistry II	CHM 227	3
		CHM 226	Organic Chemistry Lab	CHM 114, CHM 228 (could be concurrent)	2
		CHM 431 & 335 (Fall only)	Physical Chemistry & Lab	CHM 112 and 114, or CHM 192, MTH 142, and PHY 112 or PHY 204	3 & 2
		CHM 432 (Spring only)	Physical Chemistry II	CHM 431	3

One of the following:

		CHM 401	Intermediate Inorganic Chemistry	CHM 432	3
		CHM 412	Instrumental Methods of Analysis	CHM 228 and CHM 432	3
		CHM 427	Intermediate Organic Chemistry	CHM 226 and CHM 228 or CHM 292	3
		CHM 441	The Chemistry of Biological Systems	CHM 228 and CHM 432	3

Total credits in Chemistry required (minimum)

31

**Other science/math requirements:**

One year of mathematics:

		MTH 141	Introductory Calculus with Analytical Geometry	Placement test or MTH 111	4
		MTH 142	Intermediate Calculus with Analytical Geometry	MTH 141	4

One year of physics:

		PHY 203 & 273	Elementary Physics I & Lab	MTH 141 (could be concurrent)	3 & 1
		PHY 204 & 274	Elementary Physics II & Lab	PHY 203, MTH 142 (could be concurrent)	3 & 1

**6-8 additional credits** related to other sciences or science and society. Choose from the table below:

		BIO 101 & 103	Principles of Biology I & Lab		3 & 1
		BIO 102 & 104	Principles of Biology II & Lab	BIO 101, 103	3 & 1
		GEO 100	Environmental Geology		3
		OCG 301	General Oceanography	at least one year of bio or phy sci with lab	3
		CHM 391	Forensic Science Overview		1
		Choose 1: GWS 220; HIS 116; PHL 215; BIO/GEO 272			

This advising sheet was revised (5/17) in order to accurately reflect the courses that are currently available at URI. There were no major changes made to this curriculum.